

As cont. member forms the second face surface of said die unit and said guide member is one from a set of a plurality of guide members, at least one of the guide members of said set being formed to define a notch, so that when the notch-defining guiding member is secured to said die unit, the notch is part of the gate opening into said cavity.

REMARKS

This paper is submitted in response to the Office Action for the above-identified application mailed May 27, 1999.

In the Office Action, Claims 8-10 were rejected under 35 U.S.C. § 102, for being anticipated by U.S. Patent No. 4 793 953 to Maus.

Claims 8-14, in particular, independent Claims 8 and 11, were rejected under 35 U.S.C. § 112, for failing to particularly point out and distinctly claim the subject matter the applicants regard as their invention.

Nevertheless, the Office Action did state that Claims 1-7 and 11-17 are directed to a patentable invention and are either in an allowable form or would be allowable if appropriately rewritten. The Applicants thank the Examiner for this favorable review of these claims. Nevertheless, for the reasons set forth below, the Applicants respectfully decline the Examiner's offer to simply rewrite the rejected-but-patentable claims.

Initially, the Applicants call to that attention of the Examiner that enclosed with this Response is a PTO Form 1449. As the undersigned representative discussed with the Examiner on August 26, 1999, this form lists the document that was cited in the Search Report for the Patent Cooperation Treaty application upon which this application is based. As indicated by the enclosed Form PCT/DO/EO/903 for this application, this document should be the Patent and Trademark Office's file for this application. Accordingly, the Applicants would now appreciate it if the Examiner would initial the Form 1449 to acknowledge consideration of the document cited in the International Search Report. If a copy of the cited document is not in the Examiner's

file for this application, a call to the undersigned Applicants' representative will result in prompt delivery of a replacement copy.

In this Response, the Applicants first make a minor editorial change to the specification. This change does not add new matter to this application.

The Applicants now amend Claims 1, 3-6, 11-13, 16 and 17. Claim 11 has been amended to rectify the rejection raised in the Office Action. Claim 11 and the above other amended claims have also been amended to place them in more idiomatic English. The inventions defined by these claims remain unchanged. Accordingly, it is respectfully submitted that these claims all remain directed to a patentable invention.

The Applicants also take this opportunity to cancel Claims 8-10 and add Claims 18-27. Claims 18 is in independent form. New Claims 19-27 are all dependent from Claim 18.

New independent Claim 18 is directed to an injection molding die assembly for molding a lens from thermoplastic resin. The claimed assembly includes a die unit having a cavity in which the thermoplastic resin is received and in which the thermoplastic resin is molded to form the lens. The die unit also has a gate adjacent the cavity through which the thermoplastic resin is flowed into the cavity. First and second face surfaces of the die unit define the height of the gate. There is also at least one insert disposed in the cavity that defines a surface of the lens to be molded.

The assembly of Claim 18 also includes a gate member that is releasably secured to the die unit against the first face surface. The claimed gate member having a height less than the height of the gate so that the gate member and the second face surface of the die unit collectively define a gate opening through which the thermoplastic resin flows into the cavity.

Claim 18, as do all of the claims in this application, particularly points out and distinctly claims the invention to which it is directed. Therefore, the Applicants request that the



rejection directed to the failure to satisfy this statutory standard be withdrawn.

In the Office Action, the coolant risers disclosed in the '953 Maus patent were cited for being relevant to the Applicants' invention. These risers are the conduits through which coolant fluid flows in and out of the mold inserts.¹ These portals are not relevant to the claimed invention that includes a gate member that defines the opening through which resin is injected into the die cavity.

Maus merely discloses a mold in which one of the inserts, insert 10, is shaped to define both the cavity in which the molded article is formed and the sprue bushing through which the resin flows.

The above assembly does not suggest Applicants' invention as defined by Claim 18 in which a gate member is provided that, in combination with an adjacent surface of the die unit, forms the gate opening through which the resin flows. An advantage of Applicants' claimed die assembly is that the gate member is replaced as needed as a function of the shape of the lens the assembly is used to mold. Thus, depending on the lens being molded, the profile of the gate opening can be selectively set in order to ensure the appropriate resin flow for that lens into the die cavity.

Moreover, the gate member and the complementary inserts with which it is used are separate components that are removable from the die unit.² One does not have to precision mold a single part to function as both a lens-defining insert and a gate opening-defining gate member.

Furthermore, since the gate member and insert are separate from each other, one gate member can be used with different inserts. Thus, Applicants' assembly of Claim 18 provides an economical and efficient system for molding lenses having

¹U.S. Patent No. 4 793 953, Column 5, lines 16-22.

²This version of the invention is specifically recited by Claim 20.

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different shapes that ensures the resin flow into the cavity in which the lens is molded is in an appropriate flow pattern for the specific lens being molded.

The prior art fails to suggest a die molding assembly having either the features or benefits of the Applicants' invention as recited by Claim 18. Therefore, it is respectfully submitted that this claims is directed to an invention that non-obvious over the prior art and in an allowable form.

The dependent claims are all allowable at least because the depend from an allowable independent claim.

Moreover, Claims 25 and 27 are directed to versions of the Applicants' invention in which the die unit is further provided with a member that forms the second face surface that is removable. The ability to replace this component further increases the options for defining the size of the gate opening through which the thermoplastic material is introduced into the mold cavity. Since the cited reference does not suggest the desirability of being to provide replaceable gate members, it is even further removed from the invention recited by Claims 25 and 27. Therefore, at least these claims are further in condition for allowance because they are independently directed to a patentable invention.

In sum, all the claims of this application are directed to a patentable invention and are in an allowable form. Since the claims, as well as the other parts of this application are in an allowable state, the Applicants now courteously request prompt issuance of a Notice of Allowance.

Respectfully submitted,

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